Am_ndments to the Claims
This listing of claims will replace all prior versions, and listing, of claims in the application:

Listing of Claims:

1. (Currently Amended) A wavelength-determining unit for determining the wavelengths of a plurality of successive optical signals $\lambda(t)$ having a wavelength variation over time, comprising:

a wavemeter unit ~~for~~which determines~~ing~~ first wavelength values $\lambda 1(t)$ having a wavelength variation over time for the optical signals $\lambda(t)$,

an absolute-measuring unit having unambiguous wavelength properties at known absolute wavelength values, and which~~for~~ determin~~ing~~es second wavelength values $\lambda 2(t)$ having a wavelength variation over time as such of the known absolute wavelength values covered by the optical signals $\lambda(t)$, and

an evaluation unit which ~~for~~ receives~~ing~~ the~~d~~said ~~determined~~ first $\lambda 1(t)$ and second $\lambda 2(t)$ wavelength values and ~~for providing~~generates corrected wavelength values $\lambda 1'(t)$ having a wavelength variation over time based on a comparison of the determined first $\lambda 1(t)$ and second $\lambda 2(t)$ wavelength values over time.

2. (Previously Amended) The wavelength-determining unit of claim 1, wherein the wavemeter unit has a wavelength characteristic known in principle or derived from former measurements, whereby the evaluation unit adjusts the

known wavelength characteristic based on the determining second wavelength values $\lambda 2(t)$.

3. (Previously Amended) The wavelength-determining unit of claim 1, wherein the evaluation unit comprises a correlation unit for correlating the determined first wavelength values $\lambda 1(t)$ with the second wavelength values $\lambda 2(t)$.

4. (Previously Amended) The wavelength-determining unit of claim 1, wherein the evaluation unit determines at least one of one or more offset or correction values for correcting the determining first wavelength values $\lambda 1(t)$ to the corrected wavelength values λ 1'(t).

5. (Previously Amended) The wavelength-determining unit of claim 1, wherein the wavemeter unit comprises an interferometer.

6. (Previously Amended) The wavelength-determining unit of claim 1, wherein the absolute-measuring unit comprises a gas absorption cell.

7. (Currently Amended) A measuring unit for measuring an optical characteristic of a device under test, comprising:

a wavelength variable laser source which provides ~~for providing~~ an optical signal $\lambda(t)$ to the device under test, the optical signal $\lambda(t)$ having a wavelength variation over the time;

a wavelength-determining unit which receives ~~for receiving~~ the optical signal $\lambda(t)$ and determin~~inges~~ wavelength values $\lambda 1(t)$ thereof over the time, said wavelength determining unit comprising a wavemeter unit ~~for determining~~which determines first wavelength values $\lambda 1(t)$ having a wavelength variation over time for the optical signals $\lambda(t)$, an absolute-measuring unit having unambiguous wavelength properties at known absolute wavelength values, and which ~~for~~ determin~~esing~~ second wavelength values $\lambda 2(t)$ having a wavelength variation over time as such of the known absolute wavelength values covered by the optical signals $\lambda(t)$, and a first evaluation unit which~~for~~ receive~~sing~~ the determined first $\lambda 1(t)$ and second $\lambda 2(t)$ wavelength values having a wavelength variation over time and ~~for~~ provide~~sing~~ corrected wavelength values $\lambda 1'(t)$ having a wavelength variation over time based on a comparison of the determined first $\lambda 1(t)$ and second $\lambda 2(t)$ wavelength values;

a receiver for receiving a signal response on the optical signal $\lambda(t)$ provided to the device under test; and

a second evaluation unit which receiv~~inges~~ the signal response and the ~~thereto~~ corresponding determined wavelength values $\lambda 1'(t)$ having a wavelength variation over time.

8. (Currently Amended) A measuring unit for measuring an optical characteristic of a device under test, comprising:

a wavelength variable laser source which ~~for~~ provide~~sing~~ an optical signal $\lambda(t)$ to the device under test, the optical signal $\lambda(t)$ having a wavelength variation over the time,

a wavelength-determining unit which ~~for~~ receives~~ing~~ the optical signal $\lambda(t)$ and determining relative wavelength values $\lambda 1(t)$ having a wavelength variation over time and absolute wavelength values $\lambda 2(t)$ thereof over the time,

a receiver which~~for~~ receives~~ing~~ a signal response I(t) on the optical signal $\lambda(t)$ provided to the device under test, and

an evaluation unit which receives~~ing~~ the signal response of the receiver and ~~thereto~~which calculates~~ing~~ the corresponding wavelength values λ 1'(t) having a wavelength variation over time out of the wavelength values $\lambda 1(t)$ and $\lambda 2(t)$ from the wavelength-determining unit resulting in a spectral response $I(\lambda)$ of the device under test.

9. (Previously Amended) A method for determining the wavelengths of a plurality of successive optical signals $\lambda(t)$, comprising:

determining first wavelength values $\lambda 1(t)$ having a wavelength variation over time for the optical signals $\lambda(t)$, using an absolute-measuring unit having unambiguous wavelength properties at known absolute wavelength values for determining second wavelength values $\lambda 2(t)$ having a wavelength variation over time as such known absolute wavelength values covered by the optical signals $\lambda(t)$, and

providing corrected wavelength values $\lambda 1'(t)$ having a wavelength variation over time based on a comparison of the determined first $\lambda 1(t)$ and second $\lambda 2(t)$ wavelength values.

10. (Previously Amended) A software product, stored on a data carrier, for executing a method for determining the wavelengths of a plurality of

successive optical signals $\lambda(t)$, when run on a data processing system such as a computer, said method comprising:

determining first wavelength values $\lambda 1(t)$ having a wavelength variation over time for the optical signals $\lambda(t)$, using an absolute-measuring unit having unambiguous wavelength properties at known absolute wavelength values for determining second wavelength values $\lambda 2(t)$ having a wavelength variation over time as such known absolute wavelength values covered by the optical signals $\lambda(t)$, and

providing corrected wavelength values $\lambda 1'(t)$ having a wavelength variation over time based on a comparison of the determined first $\lambda 1(t)$ and second $\lambda 2(t)$ wavelength values.